

# Incorporation of the Laboratory Information Management Systems (MyLIMS) at the Maryland Department of Health and Mental Hygiene Rabies and Zoonotic Diseases Laboratory

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## BACKGROUND AND OBJECTIVE

The Maryland Department of Health and Mental Hygiene (MD DHMH) Laboratories Administration recognized the need to improve the processes in animal rabies test submissions with the Local Health Departments (LHDs), State Lab, and Center for Zoonotic and Vector-borne Diseases, as well as understand the importance of producing quality rabies testing. This project provided access and training to local Maryland county health departments and animal control employees on the use of Laboratory Information Management System (LIMS) for electronic laboratory test request and reporting.

## PROJECT DESIGN

This project was designed to provide 28 county health departments and animal control facilities with access to the MyLIMS (STARLIMS App Server Database). This application allowed the submitters to electronically submit test requests, view animal rabies testing services, view sample status, print packing slips/submission forms, and access test results. Resource tool-kits for training purposes were developed and posted on our website. (<http://dhhm.maryland.gov/laboratories/SitePages/rabies.aspx>.)



Electronic Test Request

## SUMMARY OF RESULTS

On-site training sessions were held at 17 local health departments with about 150 staff members trained. The pilot program was allotted 3 months in order to work out technical and compatibility issues. By the end of the second month, 100% of the submitters were trained in the use of the MyLIMS application. By the January 1, 2011 target date, 100% of submitters were trained and using MyLIMS. This has significantly improved work-flow processes with scanning of packing slips, increased the quality of communication with stakeholders, as well as enabled the laboratory to keep track of statistical data such as specimen demographics and turn-around-time.

## ELECTRONIC TEST REQUEST AND REPORTING

- Submission of animal rabies test electronically using the DHMH Lab MyLIMS (Laboratory Information Management Systems) (<http://starlims.dhmm.md.gov/starlims10.dhmmhlab.prod/>) by the local health departments for submission of specimens for rabies testing effective January 1, 2011.
- Updated animal rabies testing submission form.
- Allowed the LHDs to view test results on-line and print a copy of the official test report; thus minimized phone calls to the Rabies and Zoonotic Diseases Laboratory.
- This electronic access aids in reporting of statistics.

Photo 1: Laboratory Scientist Keisha Friday scans rabies testing submission forms that have been submitted electronically using MyLIMS. Photo credit: Brock Spinks

## ON-LINE RESOURCE TOOL KITS

To assist the local health departments with training, on-line resource tool kits tools and resource including the rabies submission policies, handouts, FAQs, submission forms, as well as both screen-shot and on-line video tutorials, were developed and posted on the Rabies and Zoonotic Diseases Laboratory website (<http://dhhm.maryland.gov/laboratories/SitePages/rabies.aspx>).

## STRATEGIC PLANNING AND ROLL-OUT

- The improvements in the rabies submission policies have been discussed and vetted to the local health department staff (environmental health, animal control) across the State of Maryland from June 2010 through November 2010.
- Extensive outreach by the DHMH Laboratories Administration Rabies Staff has been provided to the local health departments from October 20 2010 through October 29, 2010. These on-site trainings were held at 16 local health departments with about 140 local health department staff from Allegany, Garrett, Washington, Frederick Carroll, Cecil, Harford, Anne Arundel, Dorchester, Wicomico, Caroline, Talbot, Montgomery, Howard, Queen Anne, St. Mary's, Baltimore, Prince George's, Calvert, Charles and Worcester counties and Baltimore City in attendance. Somerset County received their on-site training November 19, 2010.
- Procedural changes were presented at the local health officer's meeting held on November 10, 2010 for the Deputy Secretary and the Local Health Officers to view the improvements and provide feedback

## CONCLUSIONS

Since January 2011, the incorporation of MyLIMS into the Rabies and Zoonotic Diseases Laboratory has overall strengthened the rabies laboratory system and significantly enhanced the laboratory efficiency. The Division of Virology and Immunology pioneered and successfully implemented the electronic test request and reporting for animal rabies testing in public health laboratories using a laboratory information management system.

### DISCLAIMER

The contents of this poster are solely the responsibility of the researchers and do not necessarily represent the official views of the State of Maryland Department of Health and Mental Hygiene Laboratories Administration.

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